



Fiscal Year 2006



EMSC Program Highlights













The Emergency Medical Services for Children (EMSC) program is administered by the Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB). The program is designed to ensure that all children and adolescents – no matter where they live, attend school, or travel – receive appropriate care in a health emergency. It seeks to improve all aspects along the continuum of children's emergency medical care – from prevention to prehospital and emergency department (ED) care to hospital and rehabilitative care.

EMSC is the only Federal program that focuses specifically on improving the quality of emergency care for children. It builds on existing emergency medical services (EMS) systems, many of which are focused on adult emergency care.

The following report highlights some of the major fiscal year (FY) 2006 activities and accomplishments of the EMSC program.

EMSC Program Funding

Since its establishment in 1985, all States, U.S. Territories, and the District of Columbia have received funding from the EMSC Program. In FY 2006, the program administered two types of grants: State Partnership and Targeted Issue. In addition, the Program funded three cooperative agreements and one contract. A description of each follows.

EMSC State Partnership Grants

State Partnership grants fund activities that improve, refine, and integrate pediatric care within the State EMS system. In addition, beginning in FY 2006, all new State Partnership grantees had to address three new core program requirements: (1) designate an EMSC program manager to build coalitions, manage projects, and provide leadership for EMSC activities; (2) report annually on performance measures (specific to EMSC), an accountability effort instituted by HRSA to measure the effectiveness of its Federal grant programs; and (3) enhance data collection, analysis, and information dissemination efforts.

The EMSC program funded 56 State Partnership grants in FY 2006. Of these awards, 47 were new grants and nine were in their third year of funding.

EMSC Targeted Issue Grants

Targeted Issue grants are intended to address specific needs or special topics of importance to EMSC. Typically the projects result in a new product or resource or the demonstration of the effectiveness of a model system component or service of value to the Nation.

Since FY 2005, many Targeted Issue grants have focused on topics that are considered a high priority by experts in the field of EMS and EMSC.

In FY 2006, most of the 16 EMSC Targeted Issue grants focused on building an evidence base for pediatric medical practice. Nine of these EMSC Targeted Issue grants received second-year funding:

- Improving the Care of Acutely III and Injured Children in Rural Emergency Departments with Telemedicine. Awarded to The Regents of the University of California. Principal Investigator: James Marcin, MD, MPH
- Development and Validation of A Simulator-based Pediatric Emergency Medicine Curriculum for Emergency Care Providers. Awarded to Northwestern University, Children's Memorial Hospital Department of Pediatrics. Principal Investigator: Mark Adler, MD
- Michigan's First Simulation, Training, and Evaluation of Paramedics in Pediatrics. Awarded to Michigan State University. Principal Investigator: William Fales, MD
- Predicting Cervical Spine Injury (CSI) in Children. Awarded to Washington University in St. Louis, School of Medicine. Principal Investigator: David Jaffe, MD
- Evaluation of the Emergency Severity Index for Pediatric Triage. Awarded to The University of North Carolina at Chapel Hill. Principal Investigator: Anna Waller, ScD
- Implementing Adolescent Depression Screening (ADS) in the Emergency Department. Awarded to The Children's Hospital of Philadelphia. Principal Investigator: Joel Fein, MD
- Evidence-based Secondary Prevention of Traumatic Stress: Practical Tools to Help Parents Help Their Children. Awarded to The Children's Hospital of Philadelphia. Principal Investigator: Flaura Winston, MD, PhD
- Enhancement of Pediatric Emergency Curricula in Physician Assistant Education. Awarded to the Medical University of South Carolina. Principal Investigator: Paul Jacques, EdM, PA
- Preparing for the National Trauma Registry for Children: Ensuring Quality Data. Awarded to the Medical College of Wisconsin. Principal Investigator: Karen Guice, MD, MPP

Seven Targeted Issue grants received third-year funding:

Web-based Quality Improvement in Emergency Medical Services for Children. Awarded to Loyola University of Chicago. Principal Investigators: Evelyn Lyons, RN, MPH and Mark Cichon, DO

- Emergency Preparedness for Children with Special Health Care Needs Using Minnesota EMSC Grantee Activities Information System. Awarded to the Regents of the University of Minnesota, Department of Pediatrics. Principal Investigator: Lee Pyles, MD
- Pediatric Emergency Medicine Fellows Conference: Creating A Future in EMSC. Awarded to Washington University, School of Medicine. Principal Investigator: David Jaffe, MD
- The School Nurse and EMS Interactive Online Learning Project. Awarded to the University of New Mexico, Health Sciences Center. Principal Investigator: Robert Sapien, MD
- Creating A Diagnosis Grouping System for Child Emergency Department Visits. Awarded to The Children's Hospital of Philadelphia. Principal Investigator: Evaline Alessandrini, MD, MSCE
- Improving the Injury Prevention Capacity of Child Fatality Review Teams. Awarded to the University of Washington, Harbor View Medical Center. Principal Investigator: Brian Johnston, MD, MPH
- Impact of An Educational Module on Prehospital Pain Management in Children. Awarded to the Medical College of Wisconsin. Principal Investigator: Halim Hennes, MD, MS

EMSC Cooperative Agreements

In FY 2006, MCHB continued to support two resource centers: the National EMSC Data Analysis Resource Center (NEDARC) in Salt Lake City, UT, and the EMSC National Resource Center (NRC) in Washington, DC (see page 5 for more information about the contract awarded to the NRC). In addition, cooperative agreements funded the Network Development Demonstration Project (NDDP) and the Central Data Management Coordinating Center (CDMCC). Information about each is provided below.

National EMSC Data Analysis Resource Center. NEDARC received continuation funding for its non-competing cooperative agreement in FY 2006 to help EMSC projects and State EMS offices develop their capabilities to collect, analyze, and utilize EMS data, as well as to implement the new EMSC program performance measures. NEDARC continues to provide data related technical assistance to all EMSC grantees, State EMS departments, and other EMS personnel on data-related issues, such as: EMS data system development; data collection, analysis, utilization; grant writing; and research.

In FY 2006, NEDARC conducted seven site visits to help States with data system development or performance measure implementation issues. At these visits, NEDARC staff led discussions and group activities with key stakeholders aimed at generating goals, objectives, and action steps for improving EMS data collection activities or developing strategies for implementing the performance measures in each State. NEDARC also redesigned and added new content to the NEDARC Web site at www.nedarc.org, which was deployed in July 2006.

Network Development Demonstration Project. NDDPs demonstrate the ability of an infrastructure or network to conduct investigations on the efficacy and effectiveness of treatments, transport, and care responses, including those preceding the arrival of children to hospital EDs. This infrastructure helps overcome historical barriers with establishing an evidence base for pediatric emergency care, such as low numbers of pediatric patients, the lack of rigorous scientific evidence for pediatric practice, and ethical challenges in conducting EMSC studies.

In FY 2006, four NDDP cooperative agreements received continuation funds: Children's National Medical Center in Washington, DC; Columbia University in New York City, NY; University of California-Davis in Sacramento, CA; and the University of Michigan in Ann Arbor, MI. These four cooperative agreements collectively form the Pediatric Emergency Care Applied Research Network or PECARN (see page 9 for more information about the activities carried out by PECARN).

Central Data Management Coordinating Center. The University of Utah, Intermountain Injury Control Research Center received new funding through a cooperative agreement to operate CDMCC. The Center provides PECARN with critical data management services, including: electronic data collection; cleaning, storage, and analysis; site monitoring and training in standardized informed consent procedures; research methodology and protocol development; and assistance with Institutional Review Board (IRB) issues.

In FY 2006, CDMCC updated the PECARN Bylaws and developed new PECARN Standard Operating Procedures (SOPs). The SOPs address adverse events, data management, communication flow, site monitoring, and IRB issues, as well as other topics that ensure the smooth operation of the network and its continued compliance with Federal regulations

concerning research with human subjects.

EMSC Contract

In FY 2006, the NRC received continuation funding to support and assist EMSC grantees in utilizing assessment data for the planning, implementation, and evaluation of grant-funded initiatives. Throughout the year, the NRC provided technical assistance to 74 EMSC grantees on a variety of projects and grant management issues. The NRC also identified, researched, and helped grantees incorporate special topics of interest into their projects. In FY 2006, these topics included: children with special health care needs, cultural competence, family-centered care, injury prevention, mental health, and patient safety. The NRC also continued to support Federal MCHB staff and worked with national organizations to support EMSC activities.

In addition, the NRC continued to operate the EMSC Grantee Listserv, the EMSC Research Listserv, and the EMSC Web site. In FY 2006, a new Web site was developed and posted to the HRSA server with a domain name of http://www.mchb.hrsa.gov/emsc/ (see page 12 for more details about the newly launched Web site).

New to FY 2006 was the production and distribution (via the Grantee Listserv) of *EMSC QuickNews*, a weekly digest of news and informational highlights of interest to EMSC grantees and partners. Each issue features EMSC Federal program activities; grantee updates; recently released studies or reports; and upcoming meetings, conferences, and webcasts.

Completed EMSC Funding Initiatives

Two special funding initiatives were completed in FY 2006: the National Trauma Registry for Children (NTRC) project and the Clinical Practice Guidelines and Enhancing Pediatric Patient Safety project. A description of each follows.

National Trauma Registry for Children. The NTRC project, jointly coordinated by the Medical College of Wisconsin and The University of Pittsburgh, was developed to investigate and design a national pediatric trauma registry. Project staff, assisted by an advisory council composed of experts in the field, identified a need for two separate data collections to address the specific needs for a national collection of pediatric trauma data. The first data collection, a statistically driven sample of pediatric trauma, addresses surveillance issues. The second data collection, a case contribution, allows more in depth analysis of selected injury types.

The investigators developed consensus derived data elements, definitions, and values for each of the proposed data collection components. Investigators also worked with the American College of Surgeons, utilizing information identified and developed by the advisory committee, to ensure that pediatric specific elements were added to the National Trauma Data Bank data collection tool. A statistic model for sampling was also developed.

Clinical Practice Guidelines and Enhancing Pediatric Patient Safety. In response to the release of the Institute of Medicine (IOM) reports Preventing Medication Errors (released in 1996) and Crossing the Quality Chasm (released in 2001), the EMSC program sought proposals for special projects to enhance quality and safety in pediatric emergency care. Two of these projects were completed in FY 2006:

- Washington University in St. Louis, MO, for its initiative addressing clinical practice guidelines, a study focusing on rehydration of children with moderate dehydration due to acute gastroenteritis. Project staff modified a guideline developed by the American Academy of Pediatrics for oral rehydration of children with moderate dehydration.
- The Utah Department of Health for an initiative that focuses on the orientation/ education of health care providers in the utilization of a color-coded system in the administration of pediatric care and reduction of medical errors.

Special Meetings, Events, and Webcasts

2006 Annual EMSC Grantee Meeting

Approximately 230 EMSC grant representatives, Federal and national organization partners, and resource center staff attended the 2006 EMSC Annual Grantee Meeting held June 20-22, in Silver Spring, MD. The meeting featured special

sessions on the most recently released IOM study "The Future of Emergency Care in the U.S. Health System" and the Model Pediatric Component for State Disaster Plans. In addition, the National Association of State EMS Officials and the newly established National EMS Information System (NEMSIS) Technical Assistance Center held their meetings in conjunction with the Annual EMSC Grantee Meeting. Videos, slides, handouts, and transcripts from the meeting are archived at www.mchcom.com.

Data Workshops

In FY 2006, the EMSC program conducted four EMSC workshops through NEDARC:

- Analyzing and Presenting EMS Data, held January 18-20, 2006, in Anaheim, CA
- How to Survey Effectively in EMS & EMSC, held April 5-7, 2006, in Chapel Hill, NC
- Scientific Grant Writing, held April 23-25, 2006, in Chicago, IL
- Program Evaluation in EMS & EMSC, held September 27-29, 2006, San Antonio, TX

2006 National Heroes Award Winners Honored

The EMSC National Heroes Award program was established in 1998 to recognize and reward outstanding achievement in emergency medical services for children and to encourage continued excellence in the field. During the 2006 Annual EMSC Grantee Meeting, five individuals and one organization were honored for their efforts to improve pediatric emergency care. A brief description of each award and the name of its recipient follows.

- EMS Provider Leadership Award was given to Steven Karl, MD, from South Dakota. This award recognizes a clinically-based health professional who has dedicated his or her time, talent, and energy to achieve the highest level of care for children in the community. This individual has helped assure the best possible care for sick and injured kids, and provides leadership in addressing priority EMSC issues.
- Outstanding EMSC Research Project Award was presented to John Tilford, PhD, for his project "Hospitalizations for critically ill children with traumatic brain injuries: a longitudinal analysis." This award highlights an individual who has completed a significant EMSC-related research study that confirms current practice or has the potential to impact the provision of pediatric emergency care at a national or international level. The project's research findings must have been published within the past 15 months.
- Family Member Volunteer of the Year was awarded to Linda Savoie from Louisiana and Melody Mesmer from Colorado. This award is given to a family member who has provided exemplary service that has made a significant positive impact on addressing the emergency medical needs of children in his or her community.
- Community Partnership of Excellence Award was given to the Oconomowoc Junior Woman's Club from Wisconsin. This award recognizes an organization that has taken a leadership role in and made significant contribution to improving emergency care for children and their families. In addition, the recipient of this award must demonstrate an ability to work collaboratively with a State EMSC program to improve pediatric emergency care in one or more States.
- EMSC Project Coordinator of Distinction Award was presented to Lata Allen from American Samoa. This award honors a person that has a comprehensive understanding of his or her State's EMSC-related issues, and has successfully integrated EMSC into State EMS programs for the long term.
- Policymaker of Distinction Award was given to Gary Brown from Virginia. This award honors an individual who has been a State public official within the past five years; has advanced State legislation promoting EMSC programs or related measures; and has a statewide, regional, or national reputation for safeguarding the health and well-being of children.

EMSC Webcasts

Through MCHB, the EMSC program conducted five webcasts in FY 2006. Each webcast is archived at www.mchcom.com.

- MCHB/EMSC's National EMS Information System, September 28, 2005
- Integrating Family Representatives into EMSC Advisory Committees, April 25, 2006
- The Institute of Medicine Study on the Future of Emergency Care in the U.S. Health System, June 21, 2006, in conjunction with a plenary session at the EMSC Annual Grantee Meeting
- Improving EMS Medical Direction for Pediatric Patients: The Role of EMS Medical Directors in Achieving EMSC Performance Measure 66A, August 22, 2006
- Improving Pediatric Trauma Care, September 27, 2006

National Partners

EMSC Partnership for Children Stakeholder Group

The 29-member EMSC Partnership for Children Stakeholder Group works to improve the emergency medical care of children through the exchange of knowledge, development of partnerships, and provision of input and counsel to the EMSC program. It is composed of representatives from two U.S. government agencies – the National Highway Traffic Safety Administration's (NHTSA) Emergency Medical Services Division and the Indian Health Service (IHS) – seven EMSC grantees, and the following 20 national organizations:

- Ambulatory Pediatric Association
- American Academy of Family Physicians
- The American Academy of Pediatrics
- American College of Emergency Physicians
- American College of Osteopathic Emergency Physicians
- American College of Surgeons
- American Pediatric Surgical Association
- American Trauma Society
- America's Health Insurance Plans
- © Emergency Nurses Association
- Family Voices

- National Association of Children's Hospitals and Related Institutions
- National Association of EMS Physicians
- National Association of Emergency Medical Technicians
- National Association of EMS Educators
- National Association of School Nurses
- National Association of Social Workers
- National Association of State EMS Officials
- National Council of State EMS Training Coordinators
- National SAFE KIDS Campaign

National Organization Projects

Through a contract or a Partnership for Information and Communication cooperative agreement, several national organizations are performing projects addressing specific pediatric emergency issues. Three of these projects were completed in FY 2006:

- Harbor-UCLA's Research and Education Institute completed its project to update a teaching video on intraosseous infusion. The video, reproduced in CD format, is scheduled for release in FY 2007 through the HRSA Information Center.
- The National Association of EMS Physicians completed its project to offer the Pediatric Emergency Medical Care Research workshop at its 2006 annual meeting. More than 20 professionals attended the workshop.
- The Ambulatory Pediatric Association project on family presence was completed. The Educational Module for Emergency Department Providers is expected to be available in CD format early next year.

One national organization requested and received a one-year, no-cost extension to complete its project in FY 2007.

The American College of Emergency Physicians, in collaboration with the Nakamoto Group, is developing clinical guidelines on the administration of sedation in pediatric patients in the ED.

Federal Collaborations

National Highway Traffic Safety Administration

The 20-year partnership between HRSA's EMSC program and NHTSA grows stronger every year. Both agencies have enjoyed a successful history of cooperation and collaboration around EMS and injury prevention issues not only for children and adolescents, but for the overall EMS system.

The interagency agreement with NHTSA provides support for, among other activities, NEMSIS, the infrastructure costs of the National Association of State EMS Officials, and the National EMS Education Standards Project.

Centers for Disease Control and Prevention

Beginning in 2001, the EMSC program collaborated with the Centers for Disease Control (CDC) and Prevention's National Center for Health Statistics (NCHS) to develop, test, and apply the Emergency Pediatric Services and Equipment Supplement (EPSES) to the National Hospital Ambulatory Medical Care Survey instrument. The purpose of the brief 30-minute supplement was to allow for a larger and more general sample than the previous National Electronic Injury Surveillance System (NEISS) studies.

In FY 2006, two papers based on the EPSES 2002-2003 data were published:

- "Availability of Pediatric Services and Equipment in Emergency Departments: United States 2002-2003" published as a CDC Advance Data Report 367 in 2006. The report is available electronically at http://www.cdc.gov/nchs/data/ad/ad372.pdf.
- "Factors Associated with Ability to Treat Pediatric Emergencies in U.S. Hospitals" has been submitted to Pediatric Emergency Care and is currently being revised following review.

The authors also are working on a report of pediatric visits to EDs based on EPSES 2003-2005 data. Additionally, data collection for the 2006 EPSES is expected to be completed in December 2006.

In 2006, the CDC also continued to co-funded two additional pediatric studies: "A Clinical Decision Rule To Identify Children With Intra-Abdominal Injuries" and "A New Method for Assessing Risk of Persistent Post-traumatic Stress In Injured Children and Their Parents" (manuscript submitted).

Indian Health Services

Through an interagency agreement, the EMSC program funds an Indian Health Services EMSC coordinator to help facilitate better coordination of State EMSC programs and tribal EMS needs. In FY 2006, the IHS EMSC coordinator helped to develop an EMSC/EMS assessment tool to determine available resources and needs of tribal EMS services. In addition, the coordinator helped to develop a guide to assist EMSC State grantees improve partnerships with tribal EMS and to address cultural needs of the tribes. The guide is scheduled for release in early 2007.

Research-related Initiatives

Pediatric Emergency Care Applied Research Network

PECARN is the first federally funded multi-institutional network for research in pediatric emergency medicine. Its goal is to conduct high priority research into the prevention and management of acute illnesses and injuries in children and youth across the continuum of emergency medicine health care.

PECARN is comprised of four Research Node Centers (those previously identified as receiving NDDP grants, see page 4), 21 hospital emergency department affiliates (HEDAs), and the CDMCC (see page 4). The PECARN HEDAs serve approximately 800,000 acutely ill and injured children each year.

PECARN is currently active in 10 projects. In FY 2006, PECARN neared completed data collection for four important studies:

- The "PECARN Core Data Project (PCDP)" collected and analyzed data from existing electronic sources and medical records at all sites in the network. This project demonstrates PECARN's capacity to collect and synthesize large quantities of basic epidemiologic information, provides data on the frequency of diagnoses seen at each ED within PECARN, and provides information for the purposes of hypothesis generation and study design development. Two manuscripts from this study have been published in peer-reviewed journals. The PECARN Core Data Project continues to obtain longitudinal data on the patients who visit network EDs.
- The "Childhood Head Trauma: A Neuroimaging Decision Rule" study represents the first prospective observational study for PECARN. The purpose of the study is to derive and validate a clinical decision rule that accurately and reliably identifies children at high risk and near-zero risk for significant traumatic brain injuries needing acute intervention after blunt head trauma. More than 40,000 patients across 25 hospital EDs were enrolled in this study. Data analysis is currently underway.
- The "Randomized Trail of Oral Dexamethasone in Acute Bronchiolitis" study is the first prospective interventional study for PECARN. Its purpose is to assess the effectiveness of a promising treatment, oral dexamethasone, for acute moderate-to-severe bronchiolitis. One prior study suggested benefit, but was limited by its small sample size and single-institution setting. This study enrolled nearly 600 patients from approximately 20 sites nationwide. The results of this study have been submitted for publication.
- The PECARN Psychiatric Emergencies Pilot Project examined referral patterns and resource utilization for patients presenting a psychiatric/mental health problem at PECARN EDs. The results of this study have been submitted for publication.

Additional studies are currently enrolling patients. These include:

- "Pediatric Off-Patent Drug Study-Lorazepam for Status Epilepticus," funded by the National Institute for Child Health Development (NICHD) under the Best Pharmaceuticals for Children Act, will be the first study to utilize the exception from informed consent regulations for a pediatric study.
- "Predicting Cervical Spine Injury in Children: A Multi-Center Case-Control Analysis," an EMSC Targeted Issues grant to identify variables that separate injured children with negligible risk for cervical spine injury (CSI) from those at non-negligible risk for CSI and to prepare for testing these criteria in the pre-and in-hospital setting. The purpose of this study is to develop CSI screening criteria that can be applied in the field to reduce the number of children at negligible risk for CSI who are immobilized unnecessarily.
- "Creating a Diagnosis Grouping System for Child Emergency Department Visits," a study to develop a Diagnosis Grouping System (DGS) to assist ED providers with a Severity Classification System (SCS) which could

accurately gauge the need for ED resources. The DGS SCS was validated in two national datasets and manuscripts are under review for publication.

"Hypothermia for Pediatric Cardiac Arrest Planning Grant" has completed the initial feasibility study, which consisted of a prospective cohort study of children experiencing cardiac arrest to determine whether children have higher survival rates and improved neurologic outcomes if treated with mild hypothermia after cardiac arrest. The next step is a randomized controlled trial, which will be funded by NICHD.

PECARN also has several other projects under development. These include:

- A study proposing to investigate crash scenes to determine a mechanistic basis for pediatric cervical spine injuries (CSI). The long-term objective of this study is to quantitatively describe the mechanical input that causes a CSI by determining crash dynamics, occupant kinematics, and spinal biomechanics.
- A study that describes medical incidents in pediatric emergency departments to analyze the epidemiology of medical errors. The study is being conducted in two phases: an ED survey measuring the climate of safety and collection and an analysis of medical incident reports from 21 PECARN sites.

Another significant achievement for PECARN this year involved improving access to the network by outside investigators. In collaboration with the Center for the Advancement of Distance Education at the University of Illinois at Chicago and the NRC, PECARN developed a user-friendly, online training module to assist non-PECARN clinicians and researchers in understanding the structure and activities of PECARN and facilitating their access to the network for EMSC priority research projects. The module is available through the PECARN Web site at www.pecarn.org.

Interagency Committee on EMSC Research

The Interagency Committee on EMSC Research (ICER) is a Federal collaborative effort begun in the mid-1990s to improve the quality and quantity of EMSC research, to foster collaboration between Federal agencies in highlighting EMSC research topics during development of research agendas, and to reduce barriers to the production of high quality EMSC research.

ICER met three times in FY 2006: in January, May, and September. At each meeting, participants received updates on the status of EMSC research conducted by PECARN and other grantees; discussed research agendas addressing EMSC and EMS issues; shared information about funding opportunities and strategies; and, in September, were informed about the pediatric section of the new IOM report "The Future of Emergency Care in the United States," released in June 2006.

Representatives from the following organizations joined the ICER in FY 2006: HRSA's Office of Rural Health Policy; the CDC's National Center for Injury Prevention and Control; the National Institute for General Medical Science; NICHD's National Center for Medical Rehabilitation Research; the National Heart, Lung and Blood Institute; and the National Institute for Neurological Disorders and Stroke.

EMSC Research Program Announcement

During FY 2006, ICER members began the renewal process for PA-05-081 (Research on Emergency Medical Services for Children), which was set to expire in November 2006. This program announcement (PA) was later re-issued as PA-07-269 to comply with the new electronic application system. The new expiration date is now July 6, 2008.

FMSC Activities of Interest

Performance Measures

EMSC collaborated with the Lewin Group to develop a revised Performance Measures Implementation Guide. The revised edition was distributed to EMSC State Partnership grantees and posted on the EMSC Web site. In addition, a list of frequently asked questions was developed and distributed to all EMSC managers and principal investigators. Fact sheets for the three performance measures were updated for posting on the EMSC Web site and for inclusion in the FY 2007 grant guidances.

In addition, Resource Center staff developed survey tools for several of the measures. The two centers also collaborated on the development and presentation of two breakout sessions on the new performance measures at the 2006 Annual EMSC Grantee Meeting.

Institute of Medicine's The Future of Emergency Care Report

Three reports from IOM's The Future of Emergency Care in the U.S. Health System project were released on June 14, 2006. The reports addressed three key focus areas of the study – prehospital, hospital-based, and pediatric emergency and trauma care. EMSC organized a panel presentation of the IOM pediatric report at the EMSC Annual Grantee Meeting that included the study chair and subcommittee chairs as presenters.

In addition, EMSC staff members attended each of the three IOM-sponsored dissemination workshops. Each workshop focused on one of the three reports. A fourth "capstone" workshop will be held December 11, 2006, in Washington, DC. Discussions on how the IOM report will be used to develop a new EMSC strategic plan took place throughout the second half of the fiscal year.

Pediatric Disaster Preparedness

The EMSC program continued to support improved pediatric disaster preparedness. EMSC distributed information on recovery efforts for Hurricanes Katrina and Rita, and educational resources were offered to the Gulf States.

In collaboration with the Center for Pediatric Emergency Medicine, EMSC staff developed a list of top pediatric disaster and terrorism preparedness resources. A disaster preparedness toolbox for the EMSC Web site was also prepared.

Family Advisory Network

The EMSC Family Advisory Network (FAN) is an alliance of family representatives from States, Territories, and the District of Columbia. Family representatives are recruited by EMSC grantees to support State and national EMSC program initiatives by sharing their expertise and life experiences as consumers of the EMS system. As of December 2006, 73 percent of EMSC grantees had recruited family representatives to sit on their State's EMSC Advisory Committee.

In FY 2006, FAN was actively involved in EMSC in a number of ways, including: the planning and organization of three workshops at the EMSC Annual Grantee Meeting; setting into motion the development of the new tool "How to Integrate and Engage Family Representatives;" and participating in the EMSC webcast Integrating Family Representatives into EMSC Advisory Committees.

Resource Center Consortium

The EMSC program continues to participate in the Resource Center Consortium, a group of representatives from 10 technical assistance centers (funded by MCHB or the Substance Abuse and Mental Health Services Administration) that meet every other month via conference call to facilitate knowledge sharing of resources, missions, and expertise. In FY 2006, each consortium member added the Web links of other members to their technical assistance center Web sites, thereby increasing grantee access to resources. A brochure describing each of the centers and their missions was updated and made available at individual grantee and professional meetings.

In addition, the Resource Center Consortium worked with MCHB and the Child Death Review Technical Assistance Center to host a webcast designed to facilitate information sharing about each center's services and to promote the integration of knowledge and services across programs for better assistance to State grantees.

FMSC Communication and Outreach

EMSC Web Site

The EMSC program significantly revamped its Web site in FY 2006 and moved it to http://www.mchb.hrsa.gov/emsc/. The old Web site (www.ems-c.org) no longer exists, and all individuals linking to the old address are now automatically transferred to the new site.

A highly anticipated feature of the new Web site is the EMSC Toolbox, a collection of information, resources, and features – including PubMed database searches – centered on a specific topic of current interest to the EMSC community. Since the new Web site's debut, two toolboxes have been featured: Pediatric Pain Management and Pediatric Disaster Preparedness.

EMSC Digest

In an effort to reduce the number of messages sent to EMSC listserv subscribers, the program created *EMSC QuickNews*, a weekly digest of program news and activities of interest to grantees, Federal partners, and organizational supporters. The first issue was posted to the Grantee Listserv in March with regular distribution on Tuesday evenings. Significant messages from *EMSC QuickNews* are selected for posting on the EMSC News section of the EMSC Web site.

Focus Groups

EMSC worked with the National Center for Cultural Competence at Georgetown University to facilitate two focus groups consisting of Latino families who discussed their needs for information about emergency care and disaster preparedness for children with special health care needs. Their recommendations were used to develop two fact sheets: Disaster Preparedness: Planning for Children and Youth with Special Health Care Needs and Common Emergencies Affecting Children and Youth with Special Health Care Needs. Both fact sheets are expected to be completed next year.

Meeting Presentations

In its continued effort to educate both grantees and non-grantees alike, EMSC staff attended several meetings in FY 2006 to present information about the EMSC program, including its mission, current activities, and topics of high priority. A few of these meetings are listed below.

- The American Academy of Pediatric National Conference and Exhibition
- American College of Osteopathic Emergency Physicians Spring Seminar
- National Association of State EMS Officials Mid-year Meeting
- National Association of EMTs Annual Symposium
- American College of Surgeons Annual Meeting
- Agency for Healthcare Research and Quality Priority Populations Seminar
- General Federation of Women's Clubs Annual Conference
- Children's Hospital of Philadelphia Sixth Annual John M. Templeton Jr. Pediatric Trauma Symposium

EMSC Publications and Resources

New Products

New EMSC-funded products released to the public this year include:

- Basic Life Support TRIPP (Teaching Resource for Instructors in Prehospital Pediatrics), Revised Edition
- After the Emergency Is Over: Post-Traumatic Stress Disorder in Children and Youth, revised 2005 (fact sheet)
- Triaging Kids During a Disaster (DVD)
- Pediatric Disaster Preparedness Guidelines.
- Be Prepared for Medical Emergencies Involving Your Child. (Brochure)

- Mow to Get Help for a Sick or Injured Child (fact sheet)
- Cómo Obtener Ayuda Cuando un Niño está Enfermo o Herido (fact sheet)
- New York State Pediatric Trauma Fact Sheets
- Child Abuse and Neglect: A Continuing Education Course for NYS EMTs. Center for Pediatric Emergency Medicine; New York State Department of Health, EMSC Program
- What to Do Until Help Arrives for a Child Medical Emergency (fact sheet)
- Lo que puede hacer en lo que llega ayuda en casos de emergencias medicas de ninos (fact sheet)
- Mandated Reporter Training for Emergency Medical Service Professionals (DVD)

Journal Articles

The following articles written by EMSC grantees, PECARN, and Resource Center staff members were published in FY 2006:

- Ball J, Liao E, Kavanaugh D, Turgel C. The Emergency Medical Services for Children Program: Accomplishments and Contributions. Clinical Pediatric Emergency Medicine (March) 2006.
- Hennes H, Kim MK. Prehospital Pain Management: Current Status and Future Direction. Clinical Pediatric Emergency Medicine (March) 2006.
- MacLean S, Désy P, Juarez A, Perhats C, Gacki-Smith J. Research Education Needs of Pediatric Emergency Nurses. *Journal of Emergency Nursing* (February) 2006.
- Frush K, Hohenhaus S, Luo X, Gerardi M, Wiebe R. Evaluation of a Web-Based Education Program on Reducing Medication Dosing Error: A Multicenter, Randomized Controlled Trial. *Pediatric Emergency Care* (January) 2006.
- Gorelick MH, Alpern ER, Singh T, Snowdon D, Holubkov R, Dean JM, Kupperman M, for the Pediatric Emergency Care Applied Research Network. Availability of Pediatric Emergency Visit Data from Existing Data Sources. Academic Emergency Medicine (December) 2005.
- Alpern ER, Stanley RM, Gorelick MH, Donaldson A, Knight S, Teach SJ. Singh T, Mahajan P, Goepp JG, Kuppermann N, Dean JM, Chamberlain JM for the Pediatric Emergency Care Applied Research Network. Epidemiology of A Pediatric Emergency Medicine Research Network: The Pediatric Emergency Care Applied Research Core Data Project. Pediatric Emergency Care (October) 2006.
- Zuspan, SJ. The Pediatric Emergency Care Applied Research Network. *Journal of Emergency Nursing* (August) 2006.

Electronic Products Downloaded

More than 65,000 products were downloaded from the EMSC Web site in FY 2006. The five most popular products downloaded include:

- Mow to Prevent & Handle Childhood Emergencies: A Handbook for Parents and People Who Care for Children
- Office Preparedness for Pediatric Emergencies: Instructor's Manual
- Emergency Care Planning for Children With Special Health Care Needs: Tools to Assist Children and Families Prepare for, Identify, and Respond to Emergencies
- Child and Adolescent Health Care Services: A Community Assessment Guide
- Traumatic Brain Injury in Children and Teens: A National Guide for Families

EMSC Clearinghouse

The EMSC Clearinghouse was formally closed at the end of FY 2006. Preparation for the closure of the clearinghouse involved a review of all EMSC-funded products. Those that had sufficient hard copies quantities in stock and whose content was still relevant were moved to the NRC for dissemination. Products that were available electronically for download were selected for ongoing dissemination either through the new EMSC Web site or NEDARC's Web site.